



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,520	08/25/2003	Michael Choi	81090077	2279
36865	7590	08/24/2005	EXAMINER	
ALLEMAN HALL MCCOY RUSSELL & TUTTLE, LLP 806 S.W. BROADWAY, SUITE 600 PORTLAND, OR 97205			SAN MARTIN, EDGARDO	
			ART UNIT	PAPER NUMBER
			2837	

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/647,520

Applicant(s)

CHOI ET AL.

Examiner

Edgardo San Martin

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/25/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Double Patenting*

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

1. Claims (1 and 12), 2 - 11 and 13 – 21 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 – 11, 13 and 19 - 26, respectively of copending Application No. 10/647,357. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented. Even though the claims in the applications are not exact duplicates, they are so close in content that they both describe the same subject matter.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 6, 7, 9 – 13, 15, 17, 18, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakase et al. (US 5,970,963).

With respect to claims 1, 12, 13 and 21, Nakase et al. teach a method and noise attenuation device for a vehicle exhaust system, comprising an exhaust pipe having a passageway for receiving exhaust gas pulses from an engine; and a plurality of vanes (Fig.11, Items 11 and 12) extending from an inner surface of the exhaust pipe and spaced apart from one another and disposed upstream of the exhaust pipe, the vanes configured to reduce turbulence in the exhaust gas pulses to reduce noise generated at the exhaust pipe (Col.2, Lines 14 – 59 and Col.4, Lines 52 – 62).

With respect to claims 6 and 17, Nakase et al. teach wherein the plurality of vanes form a honeycomb-shaped vane structure in the passageway (Fig.20).

With respect to claims 7, 10, 11, 18 and 20, Nakase et al. teach the limitations described in the claims (Fig.11; Col.2, Lines 14 – 59).

With respect to claims 9 and 15, Nakase et al. teach wherein the plurality of vanes comprise a wire mesh (Figs.25 and 26, Item 21) in the passageway.

3. Claims 1, 3, 5, 13 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kim (US 5,113,838).

With respect to claim 1 and 13, Kim teaches a method and noise attenuation device for a vehicle exhaust system, comprising an exhaust pipe having a passageway for receiving exhaust gas pulses from an engine; and a plurality of vanes (Figs.2A and 2B, Item 3') extending from an inner surface of the exhaust pipe and spaced apart from one another and disposed upstream of the exhaust pipe, the vanes configured to reduce turbulence in the exhaust gas pulses to reduce noise generated at the exhaust pipe (Fig.1; Col.1, Line 58 – Col.2, Line 56 and Col.3, Line 17 – Col.4, Line 3).

With respect to claim 3, Kim teaches wherein the vanes comprise metal vanes provided by stamped out tabs of the exhaust pipe and wherein a collar (Fig.2B, Item 3) surrounds the exhaust pipe adjacent the vanes.

With respect to claim 5 and 16, Kim teaches further comprising an inner ring disposed in the passageway, the plurality of vanes extending from an inner surface of the exhaust pipe to the inner ring (Fig.2A).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 4, 8, 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakase et al. (US 5,970,963) or Kim (US 5,113,838).

Nakase et al. and Kim teach the limitations discussed in the previous rejection, but fail to disclose the limitations described in claims 2, 4, 8, 19 and 24.

Regarding claim 2, the Examiner considers that it would have been an obvious matter of design choice to form the vanes by punching out tabs in a ring of metal. The Examiner considers that the manner in which the vanes are provided would not affect the performance of the Kim attenuator.

Regarding claims 4 and 14, the Examiner considers that it would have been an obvious matter of design choice to provide vanes of a specific material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claims 8 and 19, the Examiner considers that it would have been an obvious matter of design choice to provide the vanes with any shape or configuration because the applicant does not provide any reason for function criticality of the shape of configuration of the vanes. Actually, the applicant established throughout the disclosure that "the number, shape, axial length, inwardly extending distance, thickness, and orientation of the vanes of each embodiment **may be varied** based on desired flow characteristics and noise damping characteristics the devices".

***Conclusion***

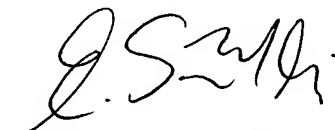
5. The attached hereto PTO Form 892 lists prior art made of record that the Examiner considered it pertinent to applicant's disclosure.

***Contact Information***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edgardo San Martin whose telephone number is (571) 272-2074. The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (571) 272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Edgardo San Martin  
Primary Examiner  
Art Unit 2837  
Class 181  
August 22, 2005